

SYSTEM FOR OPERATING DC MOTORS AND POWER CONVERTERS

ABSTRACT OF THE DISCLOSURE

A system is disclosed for driving a DC motor (15) under conditions of a controlled average current. An inductive element may be arranged for connection in series with the DC motor. A switch (14) is preferably coupled to the inductive element for connecting and disconnecting a terminal of the inductive element from the voltage source. A diode may be arranged for connection in parallel with a combination of the inductive element and the DC motor arranged in series, with the appropriate polarity so that current circulating through the inductive element circulates through the diode when the switch disconnects the terminal from the voltage source. A capacitor is arranged for connection in parallel with the motor, for limiting a resulting voltage over the motor or for storing charge depending on the embodiment of the invention. A device for measuring a current through the motor is provided, and a device (13) for controlling operation of the switch dependent upon the measured current in the motor is also provided. An airflow apparatus is also disclosed.

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